

Claims:

1. A grid nozzle of a fluidized bed reactor, being formed of a nozzle piece attached to a nozzle tube or forming one entity with said nozzle tube, which nozzle piece
5 comprises a nozzle chamber (6) and a nozzle channel (8, 10) ending to a blow opening of said nozzle, said nozzle chamber and nozzle channel being limited from above by a lid (12), **characterized** in that a protecting cover (22, 32) is attached outside the lid (12).
- 10 2. Grid nozzle in accordance with claim 1, **characterized** in that said protecting cover (22, 32) is attached spaced apart from the lid (12).
3. Grid nozzle in accordance with one of the preceding claims, **characterized** in that said protecting cover (22, 32) comprises a cover plate (24, 34) and ribs (26, 26',
15 36) arranged at least to the periphery thereof.
4. Grid nozzle in accordance with one of the preceding claims, **characterized** in that said protecting cover (22, 32) is attached to the lid (12) by means of ribs (26, 26', 36)
20 at least at the periphery of the protecting cover (22, 32).
5. Grid nozzle in accordance with one of the preceding claims, **characterized** in that heat insulation is arranged between the lid (12) and the protecting cover (22, 32).
- 25 6. Grid nozzle in accordance with one of the preceding claims, **characterized** in that the protecting cover (22, 32) is attached to the lid (12) at all sides but the one on the blow opening side of the nozzle.
7. Grid nozzle in accordance with claim 3 or 4, **characterized** in that the protecting
30 cover (22, 32) is attached to the lid (12) by ribs (26') extending to the side surfaces of said lid.
8. Grid nozzle in accordance with one of the preceding claims, **characterized** in that means are arranged at the blow opening end of the nozzle channel (8) for forming a

rising gas flow to the front of the blow opening.

9. Grid nozzle in accordance with one of the preceding claims, **characterized** in that a smooth bump (30) located on the upper surface of the nozzle channel (8) and
5 extending substantially throughout the whole width thereof has been arranged at the blow opening end of the nozzle channel (8) for forming a rising gas flow in the front of the blow opening.

10. Grid nozzle in accordance with one of the preceding claims, **characterized** in that the protecting cover (22, 32) is of the same material with the lid (12).

11. Grid nozzle in accordance with one of the preceding claims, **characterized** in that the protecting cover (22, 32) is attached by welding to the lid (12) or to the sides of the lid.

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12. Grid nozzle in accordance with one of the preceding claims, **characterized** in that the protecting cover (22,32) is ceramic.